

Patent Claims

Method for Producing a Molded Piece

1. Method for Producing a Molded Piece (24, 124), in particular dental objects, such as caps and bridgework, whereby the molded piece is brought out from a blank mold (26, 126) by machine cutting, and the working is ended with the splitting of a connection (32, 132) between the molded piece and the remaining mold blank, characterized in that the molded piece is brought out from the mold blank (26, 126) in such a way that, at completion of the outer and inner contours (28, 30, 128, 130) of the casting remain connected with blank mold via a connection in the form of a circulating partition wall (32) or a membranous connection exhibiting through holes, and that, subsequently, the connection (132) is split.
2. Procedure according to Claim 1, characterized in that the circulating partition wall (32) is split via a circular (circulating) milling.
3. Procedure according to Claim 1, characterized in that the membranous connection (132) is destroyed during manual pressure on the casting.

4. Procedure according to at least one of the previous claims,
characterized in
that the membrane-like connection (132) is split with a knife-like tool, such as a scalpel.
5. Procedure according to at least one of the previous claims,
characterized in
that the membrane-like connection (132) and/or the circulating partition wall (32) is trained in the outer boundary range and, in particular, in the area of the largest extent of the molded piece (124).
6. Procedure according to at least one of the previous claims,
characterized in
that for the manufacture of the molded piece (24, 124), the outer contour (28, 128) and then the inner contour (30, 130) is worked, or, alternatively, the inner contour and then the outer contour is worked.
7. Procedure according to at least one of the previous claims,
characterized in
that, for the manufacture of a molded piece (24, 124), a rough milling takes place first, in particular with a meander-shaped strategy and then a fine milling, in particular with a circular strategy.
8. Procedure according to at least one of the previous claims,
characterized in
that before the connection is split, a smoothing of the inner contour (28, 128) and/or the outer contour (30, 130) takes place.
9. Procedure according to at least one of the previous claims,
characterized in

that directly before splitting the connection (32, 132), the cavity of the molded piece (24, 124) is worked by fine milling.

10. Procedure according to at least one of the previous claims, characterized in
that the molded piece (24, 124), separated from the mold blank (26, 126) is cleaned circular in the area of removed connection (32, 132).
11. Procedure according to at least one of the previous claims, characterized in
that, when splitting the circulating partition wall (32), the molded piece (24) from a padded receptacle is caught in a position, which corresponds to the position, or approximately to the position of the molded piece in the mold blank (26).
12. Procedure according to at least one of the previous claims, characterized in
that, first of all, the cavity of the molded piece (124) is worked and then the membranous connection (132) for training the through holes (133, 134, 136).
13. Procedure according to at least one of the previous claims, characterized in
that after extracting the molded piece (24, 124) on this, the remainder is removed though manual working, e.g. by scraping and/or milling.
14. Procedure according to at least one of the previous claims, characterized in
that the through hole (133, 134, 136) is trained as a slot.
15. Procedure according to at least one of the previous claims, characterized in

that the connection (132) is worked in such a way that in this, preferably three elongated through holes (133, 134, 136) are trained following an elbow section or elbow-like section.

16. Procedure according to at least one of the previous claims, characterized in
that the membrane-like connection (132) is worked in such a way that, within the peripheral range of the molded piece, the length L_D of the through holes (133, 134, 136) behave like $1 : 20 \leq L_V : L_D \leq 1 : 5$ to the length L_V of the dividing connections between the molded piece and the mold blank.
17. Procedure according to at least one of the previous claims, characterized in
that the mold blank is mounted rotatable and is worked along three axes by means of a movable milling tool.
18. Procedure according to at least one of the previous claims, characterized in
that materials such as those made from pre-sintered ceramics material, such as zircon oxide or aluminum oxide are used as a mold blank (26, 126).
19. Procedure according to at least one of the previous claims, characterized in
that materials such as those made from sintered ceramics material, such as zircon oxide or aluminum oxide, are used as a mold blank (26, 126).

Summary

Method for Producing a Molded Piece

The invention refers to a procedure for manufacturing a dental object (24), whereby the object is brought out of a mold blank (26) via machine cutting, and the working is completed with the splitting of a circulating partition wall (32) or a membrane, which runs between the completely worked object and the remaining mold blank.

Fig. 2